

ABSTRACT

A door lock device can be surely unfastened under a condition where a high lateral pressure is applied to a swing door. A latch 2 is provided in a door 1 so as to project from the side surface 1a of the door 1, and a hook 6 is supported opposite to the latch 2 in a doorjamb 3. The hook 6 can turn between a latch detaining position and a latch releasing position. A hook control member 7 has a shaft 7a having a middle part 7c with a semicircular cross section, and a lever 7b extending perpendicularly to the shaft. The hook control member 7 turns between a hook detaining position at a locking position and a hook releasing position. First, second and third rocking plates 15, 21 and 24 are interlocked with the hook control member 7. When a solenoid actuator rod 36 engaging with the third rocking plate 24 projects upward to fasten the door lock device, the third rocking plate 24 is turned clockwise by the pin 38, and the second rocking plate 21 having a pin 21a pressed against the third rocking plate 24 turns clockwise. Consequently, an upper part 21b of the second rocking plate 21 comes into contact with projections 15b of the first rocking plates 15 to restrain the first rocking plates 15 from clockwise turning, and a roller 17 supported on the first rocking plates 15 engages with a lever 7b of the hook control member 7 to detain the hook control member 7 at a hook detaining position for detaining the hook 6 at the

25 locking position. When the rod 36 is retracted to unfasten the door lock device, the second and third rocking plates 1 and 24 are turned counterclockwise by springs pressing the same counterclockwise. When the second rocking plate 21 is thus turned, the upper part 21b exerts an impact on second
30 projections 15c formed in lower parts of the first rocking plate 15. Thus, the first rocking plate 15 can be turned clockwise by the impulse to enable the hook control member 7 to turn to the hook releasing position even if the lever 7b is pressed against the roller 17 by a high lateral presser P working on
35 the swing door 1 against a frictional resistance exerted by the lever 7b on the roller 17.